Amendments to the Abstract

Please delete the Abstract and add the following new Abstract:

In order to detect and iteratively decode encoded and interleaved symbols, prior to any iteration, a linear estimation (A) of the transmission channel $\hat{H}^{1}_{(z)}$ is run on the basis of specific transmitted symbols. Then, by iterations, equalization (B) and decoding (C) process are subjected to an exchange of a priori information (D_2) on the symbol bits resulting from the decoding process (C) in the case of the equalization process (B) and on the encoded bits (D_1) resulting from the equalization process (B) in the case of the decoding process (C) and an updated iterative re-estimation (G,E_2) of the transmission channel is run on the basis of the information resulting from the equalization (B) and decoding (C) process.

A replacement Abstract is attached hereto on a separate sheet in accordance with 37 CFR 1.72.

ABSTRACT

In order to detect and iteratively decode encoded and interleaved symbols, prior to any iteration, a linear estimation (A) of the transmission channel $\hat{H}^{1}_{(z)}$ is run on the basis of specific transmitted symbols. Then, by iterations, equalization (B) and decoding (C) process are subjected to an exchange of a priori information (D_2) on the symbol bits resulting from the decoding process (C) in the case of the equalization process (B) and on the encoded bits (D_1) resulting from the equalization process (B) in the case of the decoding process (C) and an updated iterative re-estimation (G,E_2) of the transmission channel is run on the basis of the information resulting from the equalization (B) and decoding (C) process.